

# Isaac Cheung

cheungis.github.io isaac.cheung@hotmail.com | 604.500.3129

# **EDUCATION**

# UNIVERSITY OF BRITISH COLUMBIA

BSC IN COMPUTER SCIENCE 3RD YEAR STANDING Vancouver, BC September 2018 - April 2022

GPA: 3.83 / 4.33 Major GPA: 4.00 / 4.33

# LINKS

GitHub:// github.com/cheungis LinkedIn:// linkedin.com/in/cheungis Website:// cheungis.github.io

# **SKILLS**

#### **LANGUAGES**

Python • Java • C • C++ • C# • Matlab TypeScript • JavaScript • Ruby • LETEX Haskell • Prolog • SQL Server

#### **VERSION CONTROL SYSTEMS**

Git/GitHub

#### **TESTING**

JUnit

#### OTHER TECHNICAL SKILLS

React • Node.js • Three.js • Swing Pygame • HTML • CSS • Android Studio

# **COURSEWORK**

#### **COMPUTER SCIENCE**

Algorithm Design and Analysis Computer Graphics Functional and Logic Programming Data Structures and Algorithms Computer Systems Software Construction Formal Systems and Logic Foundations of Computing

#### **MATHEMATICS & STATISTICS**

Probability Linear Algebra Calculus I, II, III Applied Statistics

# **EXPERIENCE**

### **AMAZON** | SOFTWARE DEVELOPMENT ENGINEER INTERN

May 2020 - September 2020 | Seattle, WA USA | Remote

- Worked on the AWS Server Migration Service team using Java and Ruby.
- Reduced the Server Migration Service Console's load time latency through implementing filtering in the API to filter replication jobs based on properties; such as job states and dates, and leveraging the changes in the console back end.
- Modified console back end to break down single API call into several smaller ones to execute asynchronously.
- Refactored AWS Server Migration Service's automated region build code, increased the region build automation's coverage from 60% to 90% and removed deprecated dependencies.

## **BGC ENGINEERING** | Web & Mobile Development Intern

January 2020 - May 2020 | Vancouver, BC Canada

- Worked on Cambio, BGC Engineering's geohazard risk management software using TypeScript, C#, and SQL Server.
- Added functionality on map identify tool, enabling the tool to select polygon geometry-based target objects.
- Designed and built 2 new helper services in Typescript which solves and manages certain concurrency issues related to the web form logic.
- Created new React web form and web form components to support engineers in the field, allowing them to electronically document inspections and remotely sync the data on various hazard sites.
- Fixed numerous bugs in both front and back end of the code base, decreasing the Jira backlog by over 10%.

# **PROJECTS**

#### SOUNDBOARD | JULY 2019

- Built a soundboard app using Android studio.
- Employs event listeners implemented with the observer design pattern.
- Created a desktop version using Java Swing.

#### **DISCORD BOTS** | JANUARY 2019

- Developed 2 bots in JavaScript with Discord JS, a node.js module.
- Designed with best practices, such as dynamic command handling.
- Bot #1 generates links to allow for ease of access to websites.
- Bot #2 automates the process of mass deleting server messages.
- Bot #2 allows for the option of searching and filtering messages to include or exclude attributes, such as the message author.

#### **LEAGUE OF LEGENDS PROFILE ANALYZER** | September 2018

- Extracts data from players and store them in profiles to analyze and compare, built with Object Oriented Programming in Java.
- Incorporated design patterns to solve problems encountered during development including the iterator and observer design patterns.
- Unit testing was done with JUnit to ensure the correctness of code.